

AZ-040-1790-5
(Rev. 12/93)

CATEGORICAL EXCLUSION REVIEW

CER Number: AZ-410-2005-0022

Applicant: David Brown & Associates, Inc.

Date: 1/11/05

Location: About one mile northeast of Clifton, Arizona, centering along Limestone Gulch, and its intersection with the San Francisco River. Within sections 17, 18, 19, and 20 of T4S-R30E (G&SRM). See Attachment 1, Locality Map.

Project: David Brown wants to conduct an electrical geophysical survey in the Clifton area as a part of a geothermal exploration program.

File No: AZA 33005

Description:

According to their application, this would be a CSAMT (controlled source audio-frequency magnetotellurics) survey, which is a "low impact, non-intrusive technique, usually involving only three or four people with one or two pick-up-sized vehicles. No trenching, drilling, road-making, or blasting is involved, and the majority of the survey can be done on foot using backpack-able equipment" (p. 1 of application). The survey involves laying out a transmitter electrical line 4000 to 5000 feet long and, several miles away in the area to be studied (Limestone Gulch), a series of about a dozen receiver wires, usually from 50 to 200 feet long, spaced along an electrical line about 100 feet from each other. Because it doesn't matter where the transmitter line is located, it will be placed along the shoulder of an existing road, causing no new surface disturbances. Attachment 2 shows the general field lay-out of the survey. None of the wires need to be straight, and can be angled or bent around obstacles and areas where access or walking is not possible. Electric pulses from the transmitter to the receiver produce a cross section of the earth's electrical resistivity properties, "providing information on subsurface faults, fractures, geologic structures, mineralization, and groundwater" (p. 2 of application).

No new roads are planned, and vehicles will not leave existing roads. Vehicles will be standard four-wheel-drive pick-up trucks, with a small trailer pulled by one of the trucks for hauling an electric generator used for the transmissions. Equipment will be hauled by hand to their ultimate place of use.

The application also states:

In essence, the work will consist of placing electrodes in the ground, imposing a current, and recording the results. Very

little surface disturbance will occur as a result of this work. Any surface disturbance caused by burying electrodes will be cleaned up and returned to original condition. At each setup site, the area will be policed after work is complete for trash or other inadvertent impacts.

Categorical Exclusion No: 516 DM 6, Appendix 5.4, B, Geophysical Exploration

The Proposed action conforms with the applicable Land-Use Plan: YES NO

	EXCEPTION APPLIES (YES/NO)	DATE	SOURCE
(1) Health & Safety	YES NO		
(2) Unique Resources	YES NO		
(3) Controversial	YES NO		
(4) Risks	YES NO		
(5) Precedent	YES NO		
(6) Cumulative	YES NO		
(7) Cultural & Historical	YES NO		
(8) T.& E. Species	YES NO		
(9) Violates Executive Orders 11988 or 11990	YES NO		
(10) Violates Law	YES NO		

Comments on the exceptions listed above:

As explained in 516 DM 6, Appendix 5.4, B, Geophysical Exploration, a Categorical Exclusion (CX) is warranted in situations like this where the geophysical work entails non-destructive, non-surface disturbing activity - the section notes that such non-destructive data collection falls under the DOI's CX List No. 1.6. When geophysical exploration "is deemed to be of a 'destructive nature', an EA or EIS would be required."

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Specialists for each resource listed below should review the proposed action and determine whether major impacts can be anticipated. If impacts are anticipated, provide feedback to the Area Manager.

<u>CRITICAL ELEMENTS</u>		<u>AFFECTED</u>		<u>MAJOR ISSUES</u>		<u>AFFECTED</u>	
<u>Subject</u>	<u>Input By</u>	<u>YES</u>	<u>NO</u>	<u>Subject</u>	<u>Input By</u>	<u>YES</u>	<u>NO</u>
<u>ACECs *</u>				<u>Access</u>			
<u>Air Quality *</u>				<u>Engineering</u>			
<u>Cultural Res *</u>				<u>Hydrology</u>			
<u>Flood Plains *</u>				<u>Land Use</u>			
<u>Haz/Materials *</u>				<u>Outdoor Rec.</u>			
<u>Nat.Amer.Rel. *</u>				<u>Paleontology</u>			
<u>Pr/Uni Farmlnd *</u>				<u>Range</u>			
<u>Solid Waste *</u>				<u>Soils/Geology</u>			
<u>T&E Animal *</u>				<u>Vegetation</u>			
<u>T&E Plant *</u>				<u>Water Rights</u>			
<u>VRM *</u>				<u>Wildlife</u>			
<u>Water Quality *</u>				<u>Other</u>			
<u>Wetland/Ripar *</u>							
<u>Wilderness *</u>							
<u>Wild&Scenic R. *</u>							

* Critical Elements Required by Federal Laws.

This review indicates that the proposed action meets the criteria for a categorical exclusion. YES NO

Categorical Exclusion Review (CER)

Compliance and Assignment of Responsibility:

BLM Safford Geologist (Larry Thrasher)

Monitoring and Assignment of Responsibility:

BLM Safford Geologist (Larry Thrasher)

Required Stipulations:

1. Minimize disturbances of vegetation as much as reasonably practical.
2. The working area shall remain safe for humans or animals at all times.
3. Any disturbed soils will be put back as close as reasonably possible to original contours upon completion of work.
4. The operator shall promptly and properly remove and dispose of all waste caused by his activities. The term "waste" as used herein means all discarded matter including, but not limited to, trash, garbage, refuse, petroleum products, and equipment.
5. Any archaeological, historical, or vertebrate fossil remains discovered during operations shall be left intact and undisturbed, all work in the immediate area of the find shall stop, and the BLM Safford Office shall be notified immediately. Commencement of work in that area shall be allowed upon clearance by the Safford Office.
6. The operator shall fully indemnify or hold harmless the United States for any liability or damage or claims arising in connection with the operator's activity.

I have reviewed the proposed action using the Categorical Exclusion Review (CER) process described in BLM Manual H-1790-1 pages II-1 and II-2 and appendix 4. The proposed action does not seem to conflict with major land-use plans and will not have major adverse impacts on other resources. Therefore, it does not represent an exception, and is categorically excluded from further environmental review.

Prepared by: Larry Thrasher Date: 1/18/05

Reviewed by: Marlo Draper Date: 1-28-05
(Environmental Coordinator)

Approved by: Thomas Schnell Date: 2/1/05
(Resource Area Manager)